ACCESSION NR: AT4045962

... the charges in the shot holes located in such a way that the cumulative ... coincided with the direction of the line of least resist- ... of 112 explosions ...

... was tested with a prism ... determined charges ... the particle variations ... point of view of crushing and other ... Orig. art. has: 4 tables and ... figures.

ENCL: 00

SUB CODE: MA

NO REF SOV: 000

OTHER: 000

Card 3/3

KATSANOVICH, G.A., inzh.; ABLATIPOV, R.I., inzh.; KROPOTOV, A.I., inzh.

Replies to B.IA.Bekker's article "Industrial a.c. signaling networks."
Energetik 10 no.2:6-10 F '62. (MIRA 15:2)
(Electric networks) (Bekker, B.IA)

KROPOTOV, A.I. (Leningrad)

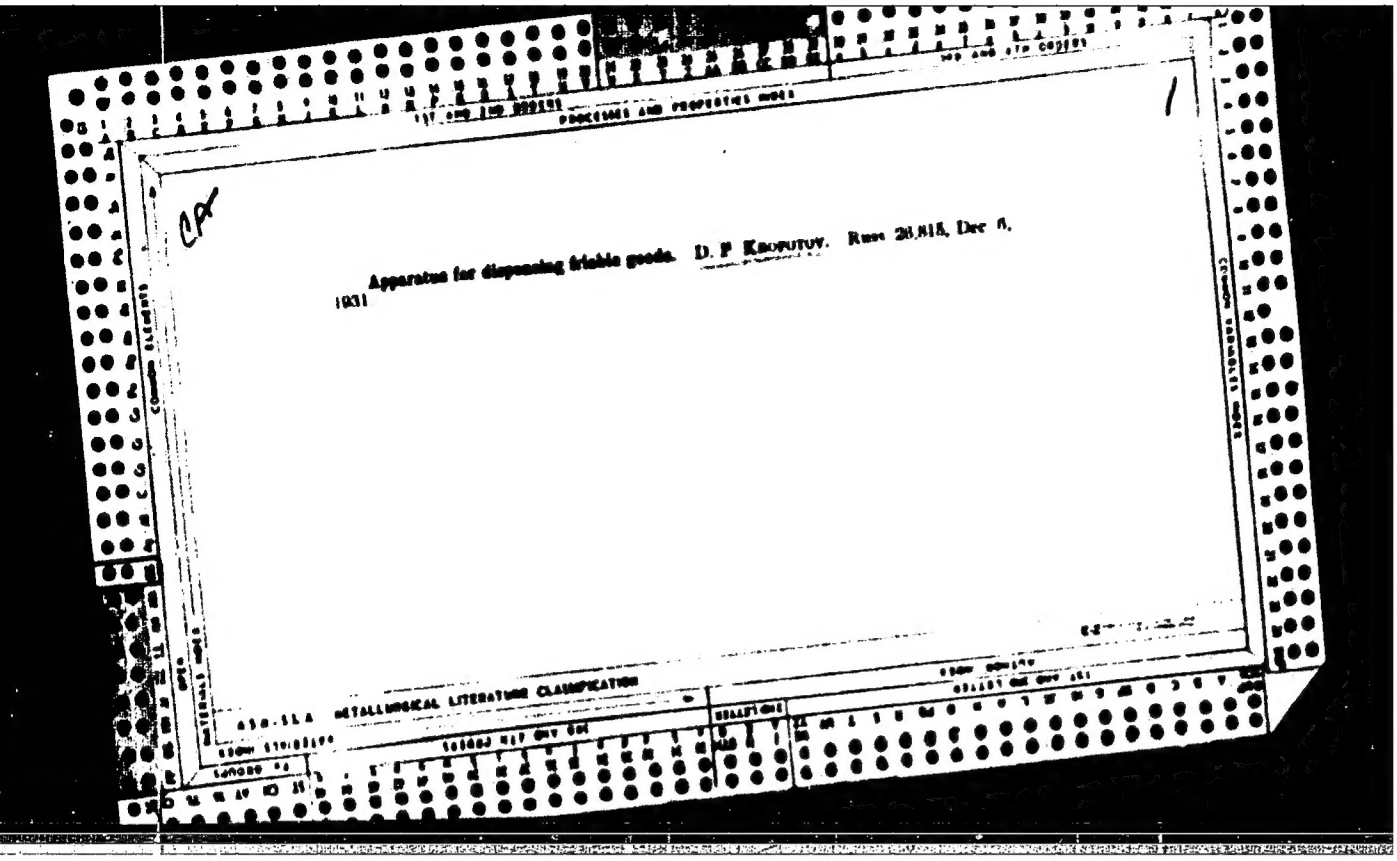
History of mathematics at the 4th All-Union Mathematical Congress. Vop. ist. est. i tekh. no.13:185-189 '62. (MIRA 16:5)

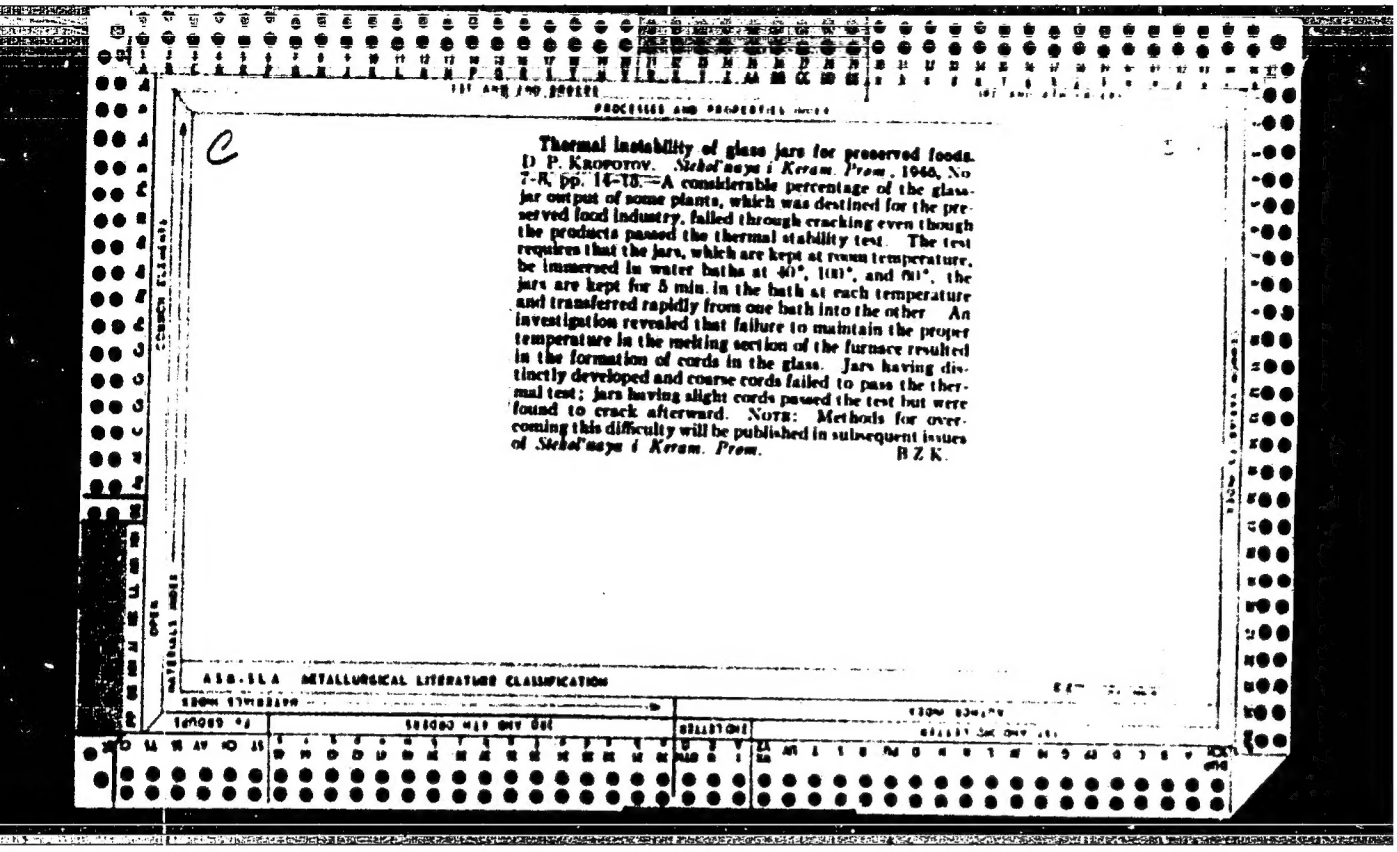
(Mathematics—Congresses)

KHOPOTOV, Aleksandr Ivanovich; GENKIN, L.S., red.; TELYASHOV, R.Kh., red.izd-va; BELOGUROVA, I.A., tekhn. red.

[Photocell pickups in control equipment of chemical industries] Fotoelementy - datchiki v priborakh kontrolia khimicheskikh proizvodstv. Leningrad, 1963. 19 p. (Leningradskii dom nauchno-tekhnicheskoi propagandy. Obmen peredovym opytom. Seriia: Pribory i elementy avtomatiki, no.19) (MIRA 16:12)

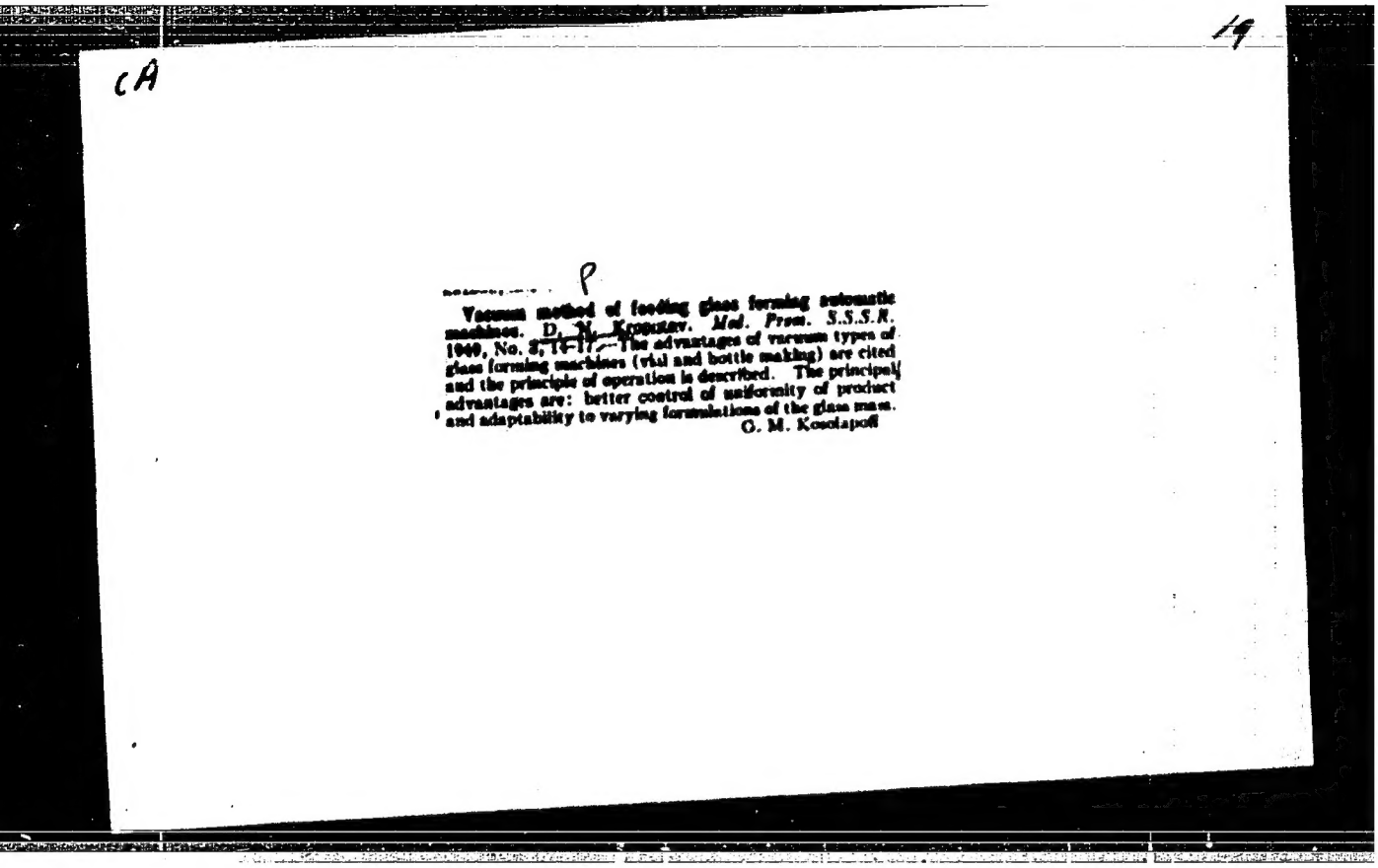
(Chemical industries) (Automatic control)
(Photoelectric cells)





C

Thermal instability of glass jars for preserved foods. D. P. Kroporov. *Steklo'naya i Keram. Prom.*, 1946, No. 7-8, pp. 14-18.—A considerable percentage of the glass-jar output of some plants, which was destined for the preserved food industry, failed through cracking even though the products passed the thermal stability test. The test requires that the jars, which are kept at room temperature, be immersed in water baths at 40°, 100°, and 60°, the jars are kept for 5 min. in the bath at each temperature and transferred rapidly from one bath into the other. An investigation revealed that failure to maintain the proper temperature in the melting section of the furnace resulted in the formation of cords in the glass. Jars having distinctly developed and coarse cords failed to pass the thermal test; jars having slight cords passed the test but were found to crack afterward. NOTE: Methods for overcoming this difficulty will be published in subsequent issues of *Steklo'naya i Keram. Prom.* B Z K.

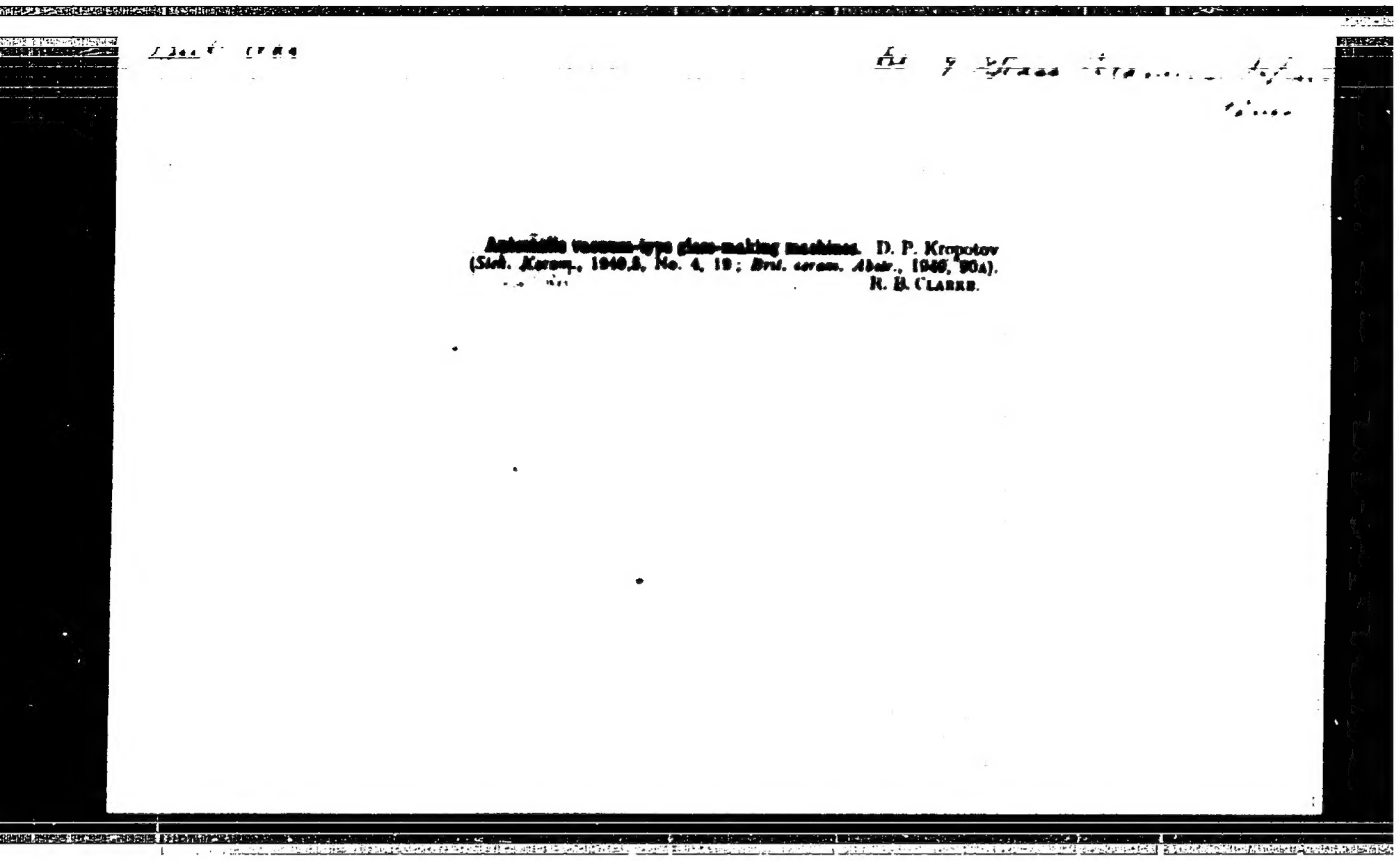


cA

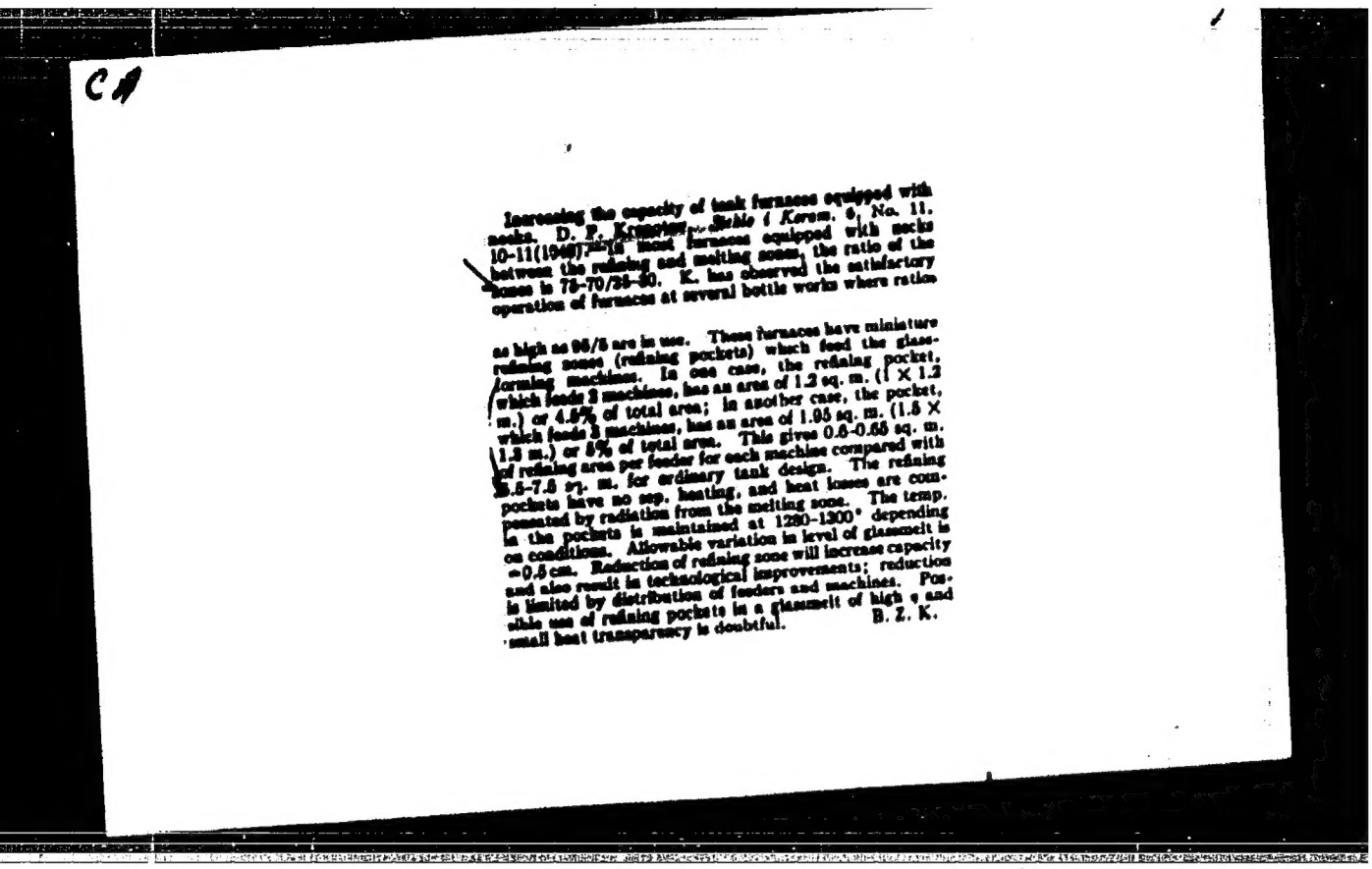
4

P

Vacuum method of feeding glass forming automatic machines. D. N. Krogulev. *Mol. Prom. S.S.S.R.* 1949, No. 3, 14–17.—The advantages of vacuum types of glass forming machines (vial and bottle making) are cited and the principle of operation is described. The principal advantages are: better control of uniformity of product and adaptability to varying formulations of the glass mass.
O. M. Kosolapoff



Automatic vacuum-type glass-making machines. D. P. Kropotov (Steklo i Keram., 1949, 6, No. 4, 19; Brit. ceram. Abstr., 1950, 90A).
R. B. CLARKE.



C1

Increasing the capacity of tank furnaces equipped with necks. D. P. Kuznetsov. *Steklo i Keram.* 5, No. 11, 10-11(1948).—In most furnaces equipped with necks between the refining and melting zones, the ratio of the zones is 75-70/25-30. K. has observed the satisfactory operation of furnaces at several bottle works where ratios as high as 95/5 are in use. These furnaces have miniature refining zones (refining pockets) which feed the glass-forming machines. In one case, the refining pocket, which feeds 2 machines, has an area of 1.2 sq. m. (1 × 1.2 m.) or 4.8% of total area; in another case, the pocket, which feeds 3 machines, has an area of 1.95 sq. m. (1.5 × 1.3 m.) or 8% of total area. This gives 0.6-0.65 sq. m. of refining area per feeder for each machine compared with 2.5-7.5 sq. m. for ordinary tank design. The refining pockets have no sep. heating, and heat losses are compensated by radiation from the melting zone. The temp. in the pockets is maintained at 1280-1300° depending on conditions. Allowable variation in level of glassmelt is ±0.5 cm. Reduction of refining zone will increase capacity and also result in technological improvements; reduction is limited by distribution of feeders and machines. Possible use of refining pockets in a glassmelt of high η and small heat transparency is doubtful. B. Z. K.

Glass

BCS

501. A three-sleeve vacuum machine for shaping small glass containers.--
D. P. Kropotov and A. D. Zverkov (Stek. Keram., 7, No. 7, 11, 1950).
There are two sizes of this machine in Russia. The article deals with the small model. The machine is stated to be not very efficient and incapable of competition with multisleeve machines, but since it is better than the primitive semi-automatic "VSM" type, which is the most commonly used in Russia the machine is described and some suggestions are given for its employment. (3 figs)

KHLPUTOV, Dmitriy Petrovich; KO[illegible], A.Ye., retsenzent; [illegible] .I., spetsredaktor; [illegible]NITSKAYA, A.[illegible], redaktor; KI[illegible], [illegible], tekhnicheskiy redaktor

[Manufacturing glass containers for perfumes] Proiz[illegible] [illegible]tvo parfiumernoi steklotary. Moskva, Pishchepromizdat, 195[illegible]. 11[illegible] p.
(Glass manufacture) ([illegible] 10:10)

KROPOTOV, D.P.

Mechanization of the production of perfume bottles.
Stek.i ker. 17 no.5:38-40 My '60. (MIRA 13:8)
(Bottles)

KROPOTOV, D.P.

Feeder with two pans. Stek.i ker. 18 no.5:37-38 My '61.
(MIRA 14:5)
(Moscow--Glass furnaces)

KROPOTOV, D.P.

Case of the repair of a pot furnace when hot. Stek.i ker. 20 no.2:38-39 F '63. (MIRA 16:2)

1. Moskovskiy khrustal'nyy zavod imeni M.I.Kalinina.
(Glass furnaces--Maintenance and repair)

KOTLYAR, Abram Yevseyevich; KROTOV, D.F., retsenzent; DUBROVSKIY, F.N., red.

[Manufacture of glass containers] Proizvodstvo stekliannoi tary. Moskva, Izd-vo "Legkaia industriia," 1964. 358 p. (MIRA 17:8)

S/121/63/000/003/003/005
E194/E455

AUTHOR: Kropotov, G.A.

TITLE: Cutting forces and temperature in cutting the teeth of gear wheels of heat-resistant and titanium alloys

PERIODICAL: Stanki i instrument, no.3, 1963, 24-27

TEXT: The article describes a study of cutting force and temperature when hobbing gearwheels on a "Fellowes" no.7 model hobbing-machine. The blanks were of heat-resistant alloy ЭИ827 (EI827), titanium alloy ВТ14 (VT14) and, for comparison, steel 40Х (40Kh). The main tests were made on involute gears with a modulus of 1 mm, rim width of 10 mm, with 38 to 50 teeth. The cutting tools were disc hobs class В (V) to standard ГОСТ (GOST) 9323-60 of steel Р18 (R18) of hardness 62 to 65 RC. Tests were made with and without sulfurized cutting oil: its use reduced the temperature by about 20% but had little effect on the force. The cutting force was measured on a special dynamometer based on strain gauges. The temperature was assessed by the natural thermocouple method, using the workpiece and tool, and recording on an oscillograph. The test conditions are described

Card 1/3

in detail, the results are plotted in the form of graphs of maximum force and of temperature as functions of speed and feed, and formulas are given for the maximum and mean forces and temperatures as functions of the various experimental variables. Conclusions. The maximum cutting force was registered on entering the hob into the blank; it was about 1.5 times the mean force, which itself is 20 to 30% greater than the minimum force. With wear of about 0.3 mm on the rear surface of the hob teeth, the cutting force and temperature increase by a factor of about 1.3. Increased cutting speed is accompanied by some reduction in cutting force. The cutting force is proportional to the first power of the modulus of the gear wheel, and not to the second as is usually stated. Under given conditions, the force required to cut alloy EI827 is almost twice as great as for alloy VT14 and only half that for steel 40Kh. The cutting temperature generated with alloy EI827 is approximately 3.7 times higher and with alloy VT14 about 3 times higher than for alloy 40Kh. Therefore, in hobbing heat-resistant and titanium alloys the heat factor has a great influence on tool life. Since the cutting temperature [illegible] the speed that on the feed it is advantageous [illegible] so use high feed rates rather than high speeds.

Cutting forces ...

depends more on the speed than on the feed it is advantageous, from the thermal standpoint, to use high feed rates rather than high speeds. There are 8 figures and 2 tables.

Card 3/3

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000826630005-1"

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000826630005-1"

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000826630005-1"

KROPOTOV, G.A., aspirant

Slotting gear wheels made of heat-resistant and titanium alloys.
Trudy MATI no.60:60-71 '64. (MIRA 17:11)

KROPOTOV, I.I.; ROYER, Ye.N., redaktor; MAL'KOVA, N.V., tekhnicheskiy redaktor

[Bridges and culverts; manual for bridge construction foremen] Mosty i truby; posobie desiatniku-mostoviku. Moskva, Izd-vo dorozhno-tekhn. lit-ry Gushosdora MPS, 1953. 247 p. [Microfilm] (Bridge construction) (MLRA 7:10)
(Culverts)

GIBSHMAN, Ye.Ye., redaktor; DZHUNKOVSKIY, N.N., redaktor; YEGOROV, P.A., inzhener, redaktor; NITROPOL'SKIY, N.M., professor, redaktor; PUSHTORSKIY, Ye.I., inzhener; ROYER, Ye.N., inzhener; POLIVANOV, N.I., dotsent; KURDYUMOV, M.D., inzhener; OSTROVIDOV, A.M., inzhener; KROPOTOV, I.I., inzhener; VOLKOV, V.P., dotsent.

[Handbook on the planning, construction and operation of city roads, bridges and hydraulic structures] Spravochnik po proektirovaniiu, stroitel'stvu i ekspluatatsii gorodskikh dorog, mostov i gidrotekhnicheskikh sooruzhenii. Pod red. E.E.Gibshman, N.N.Dzhunkovskii, P.A.Egorov. Moskva, Izd-vo Ministerstva kommunal'nogo khoziaistva RSFSR. Vol. 1. [Bridges] Mosty. Pod red. N.M.Nitropol'skii, 1953. 984 p. (MLRA 7:1)

(Bridges) (Tunnels) (Retaining walls)

KROPOTOV, Ivan Ivanovich; YERIN, B.G., red.; ZUYEVA, N.K., tekhn.red.

[Bridges and culverts] Mosty i truby. Izd. 2-oe, perer. i dop. Moskva, Nauchno-tekhn. izd-vo avtotransp. lit-ry, 1958. 186 p. (MIRA 11:5)
(Bridge construction)
(Culverts)

KROPOTOV, Ivan Ivanovich; BLAGORAZUMOV, R.V., red.; DEBERDEYEV, B.S., red. izd-va; GALAKTIONOVA, Ye.N., tekhn. red.

[Ferry crossings] Parommye perepravy. Moskva, Avtotransizdat, 1963. 80 p. (MIRA 17:1)

KROPOTOV, L.L.

Representing the integral formulas of Newton-Leibniz, Green, Stokes, Gauss, and Ostrogradskii by one formula. Trudy Inst. mat. i mekh. AN Uz. SSR no.13:135-151 '54. (MIRA 11:6)
(Integrals, Generalized)

VEDUTIN, V.F., inzh.; KROPOTOV, V.A., inzh.

Borehole charges with a longitudinal cumulative groove.
Vzryv. delo no.51/8:280-288 '63. (MIRA 16:6)

(Blasting)

KROPOTOV, V.A., inzh.; PARSHIN, V.A., inzh.; MOZOLEV, A.V., inzh.; KHRAMTSOV, V.F., inzh.

Causes for the caving of intercompartment pillars and ceiling. Bezop. truda v prom. 7 no.7:8-10 Jl '63. (MIRA 16:9)

1. VostNIGRI.

(Temir-Tau—Iron mines and mining)

GROKHOTOV, N.V. [deceased]; KROPOTOV, V.A.

Using wastes from other branches of industry. TSement 29 no.5:3-5 S-O '63. (MIRA 16:11)

1. Leningradskiy sovet narodnogo khozyaystva.

VEDUTIN, V.F., inzh.; KROPOTOV, V.A., inzh.

Borehole charges with a longitudinal cumulative groove.
Vzryv. delo no.51/8:280-288 '63. (MIRA 16:6)

(Blasting)

VEDUTIN, V.F., gornyy inzh.; KROPOTOV, V.A., gornyy inzh.; BEKETOV, P.Ye.; NIKOLAYEV, V.P.

Results of studying the effect of detonating cumulative borehole charges. Vzryv. delo no.54/11:219-230 '64. (MIRA 17:9)

1. VostNIGRI.

KROPOTOV, V. I.

Dyeing wood. S. Ya. Korotkov, M. T. Mysenko, S. I. Nikolaev, V. I. Kropotov, and R. I. Feinbrun. U.S.S.R. 68-437, May 31, 1947. In order to bring out the grain of wood used for surfacing, the wood, having a moisture content of 30-40% is pressed at about 140° prior to dyeing.

M. Hoseh

KROPOTOV, V.I.; LAHKOVSKIY, S.S.

Latex and polyurethan sponge rubber for upholstered furniture.
Der.prom. 9 no.3:4-6 Mr '60. (MIRA 13:6)
(Foam rubber) (Furniture)

KROPOTOV, V.I., inzh.; REZNIK, G.B.

Manufacture of shaped plastic rims for furniture. Der. prom. 10 no.7:27-29 Jl '61. (MIRA 14:7)

1. TSentral'noye proyektno-konstruktorskoye byur Upravleniya mebel'noy promyshlennosti Mosgorsovnarkhoza.
(Furniture industry) (Plastics)

KROPOTOV, V.I.

All-Union Scientific Technological Conference on Problems in the Synthesis on New Products Based on Rosin and Turpentine. Gidroliz. i lesokhim. prom. 16 no.5:31 '63. (MIRA 17:2)

KROPOTOV, V.I.

Make better use of sulfite liquor in the Woodpulp Combines of the Kaliningrad Province. Gidroliz. i lesokhim.prom. 17 no.2: 25-26 '64. (MIRA 17:4)

1. Gosudarstvennyy komitet po lesnoy, tsellyulozno-bumazhnoy, derevoobrabatyvayushchey promyshlennosti i lesnomu khozyaystvu pri Gosplane SSSR.

Kropotov, V. K.

137-1958-3-4747

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 3, p 40 (USSR)

AUTHORS: Stefanovich, M. A., Kropotov, V. K.

TITLE: Conditions for the Production of Low Sulfur Pig Iron (Usloviya polucheniya chuguna s nizkim soderzhaniyem sery)

PERIODICAL: Sb.: nauchn tr. Magnitogorskiy gorno-metallurg. in-t, 1957, Nr 11, pp 5-33

ABSTRACT: The S content in the pig iron (PI) smelted in the furnaces of the Magnitogorskiy Combine decreased from 0.045 - 0.051 percent in 1951 to 0.036 percent in 1954. This decrease in the S content is attributable to the following factors: an 11-16 percent reduction in the amount of S introduced with the charge (this was accomplished by reducing the coke consumption, removing the Mn-ore from the charge, and reducing the amount of S in crushed ore), and an increase in the coefficient of distribution of S between the PI and the slag (accomplished by increasing the alkalinity of the slag and its temperature and by reducing its amount). Statistical processing of the production data, as well as a study of the peculiarities in the behavior of S under laboratory conditions (distribution of S between the PI and the slag, and the

Card 1/2

Conditions for the Production of Low Sulfur Pig Iron

viscosity of slag), have demonstrated that PI with a low [S] may be obtained by means of increasing the alkalinity of the slag, and by raising its temperature. In order to reduce the [S] content in open-hearth, low-manganese (approx. 0.2 percent Mn) PI, to 0.03 - 0.035 percent, it is recommended that the $CaO \cdot SiO_2$ ratio in the slag be increased to 1.12 - 1.13, and that the MgO content be raised to 8-9 percent. It is pointed out that the process of desulfurization of PI is facilitated if the $CaO:SiO_2$ ratio in the fluxed sinter is constant.

M. O.

13.3200

77599
SOV/133-60-2-3/25

AUTHOR: Kropotov, V. K. (Engineer)

TITLE: Results of Temperature Measurements in Blast Furnace Hearth Through Cinder Notch

PERIODICAL: Stal', 1960, Nr 2, pp 107-110 (USSR)

ABSTRACT: In order to study the variation of temperature in a blast furnace hearth and the influence of coke movement on it, an improved cinder-notch stopper designed by L. D. Yupko was used. The end of the cinder-notch stopper with thermocouple for continuous temperature measurement at the circumference of the blast furnace hearth is shown in Fig. 2. The temperature was measured through the cinder notch on blast-furnaces A (13 experiments) and B (10 experiments). Cinder notch in furnace A is located under the blast box, and in furnace B between the blast boxes. Temperature measurements for several tests are compared in Figs. 3 and 4.

Card 1/8

Results of Temperature Measurements in Blast Furnace Hearth Through Cinder Notch

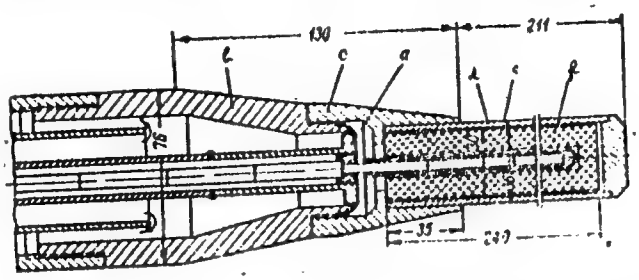


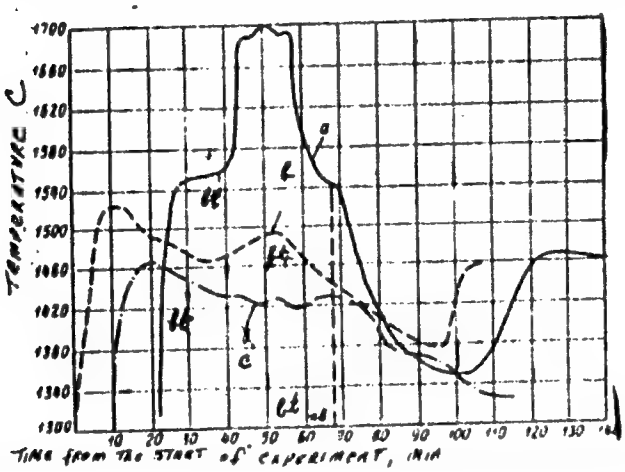
Fig. 2. The end of slag-notch stopper with thermocouple for continuous temperature measurement at the circumference of the blast furnace hearth. (a) head; (b) cinder bott; (c) detachable conical ring; (d) protective steel cover; (e) thermocouple; (f) graphite adapter 240 mm.

Card 2/8

Results of Temperature Measurements in Blast Furnace Hearth Through Cinder Notch

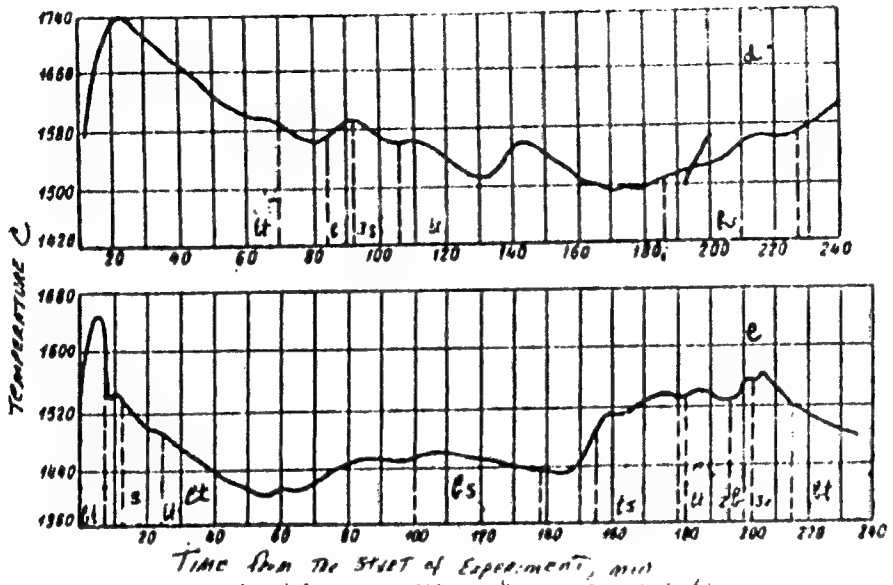
77603
SOV/133-60-2-3/25

Fig. 3. The change of temperature on the circumference of the blast furnace hearth (furnace B in 1958). (a) 6/4; (b) 6/23; (c) 6/24; (bt) beginning of tapping; (et) end of tapping.



Card 3/8

Results of Temperature Measurements in Blast Furnace Hearth Through Cinder Notch



Card 4/8

Caption to Fig. 4 on Card 5/8

Fig. 4. The change of temperature in the hearth close to the cinder notch (furnace A).(d) 9/5; (e) 9/16; (bt) beginning of tapping; (et) end of tapping; (3e) (3e) beginning of filling second or third ladle with cast iron; (s) lower slag; (ts) tapping of upper slag through another slag notch.

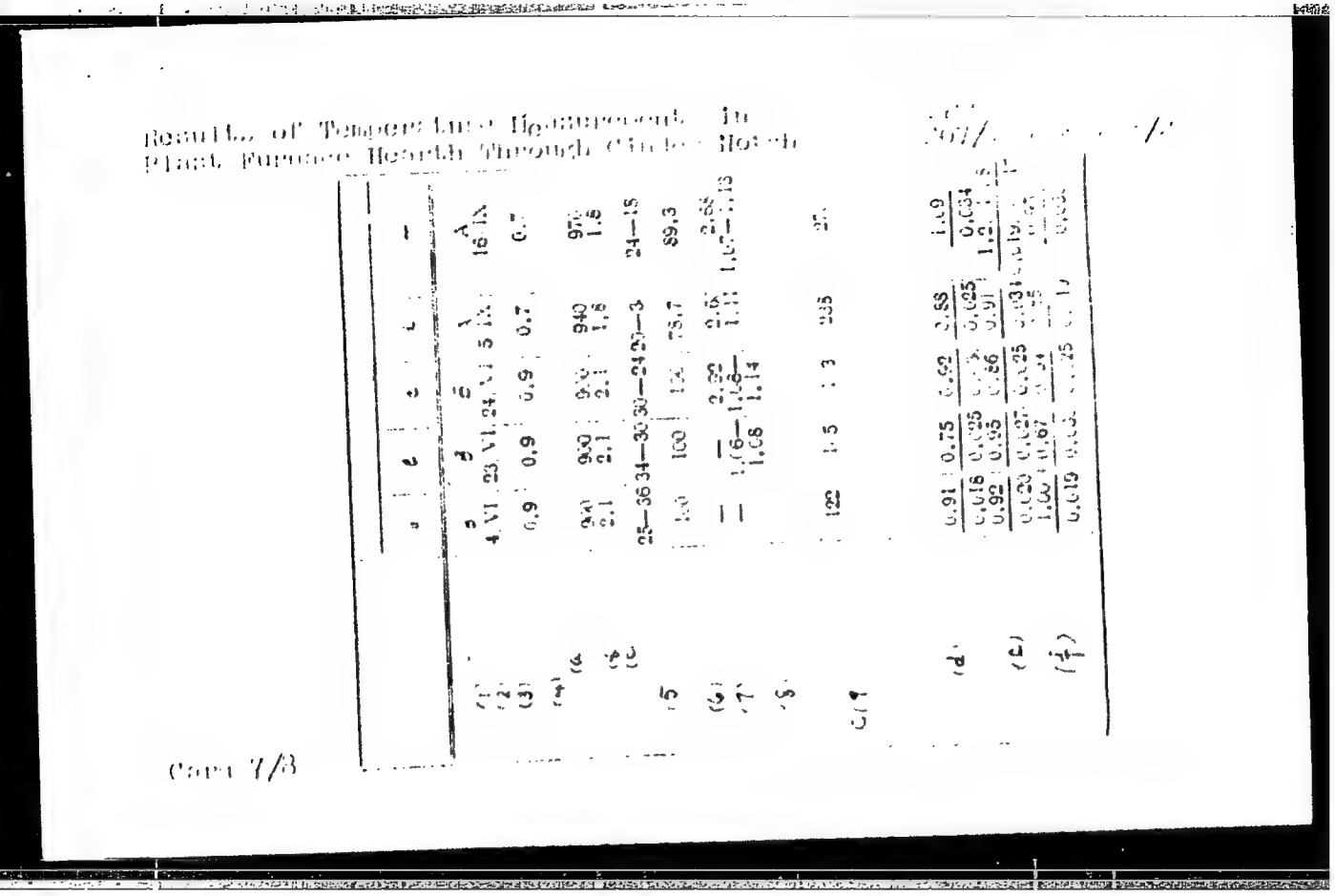
The results of the investigation are the following: (1) Temperature at the circumference of the hearth, as a rule, decreases at the end of tapping and increases before the tapping. (2) When temperature after a tapping drops considerably, the mechanical properties of cast iron do not change and the content of S in the next tapping remains the same. When the temperature drops slightly, the S content in the next tapping drops sharply. This can be seen in Table 1 (experiments d, e). (3) The changes of temperature close to the cinder notch depend on the following factors: (a) periodical displacement and sinking of coke in the hearth; (b) deoxidation of ferrous oxides. (4) The

Results of Temperature Measurements in Blast Furnace Hearth Through Cinder Notch SOV/133-60-[illegible]

variations of temperature between the subsequent taps at the circumference of the blast furnace hearth are apparently associated with the definite processes which take place in the furnace hearth and deserve further investigation. The following authors have worked on the same subject: D. V. Yefremov, I. G. Polovchenko, M. A.Stefanovich, and B. F. Goncharov. The following participated in this work: V. M. Zudin, I. I. Sagaydak, I. P. Manayenko, I. D. Skuftymov. There are 2 tables; [illegible] figures; and 4 Soviet references.

ASSOCIATION: Magnitogorsk Mining-Metallurgical Institute (Magnitogorskiy metallurgicheskiy institut)

Card 6/8



Results of Temperature Measurements in Plant Furnace Hearth Through Circular Holes

Copy 7/8

Results of Temperature Measurements in Blast Furnace Hearth Through Cinder Notch

Table 1. Characteristics of blast furnace work during the experimental period (Figs. 3,4). (1) Blast furnace; (2) date of experiment; (3) pressure of blast furnace gas; (4) blowing parameters: (a) temperature, °C, (b) pressure, atm/cm², (c) moisture, g/m³; (5) amount of sinter in charge, %; (6) ore load, ton/ton; (7) basicity of stock; (8) duration of experiment, min (measurement of temperature); (9) silicon content, % (numerators), and sulfur content, % (denominators), in cast iron tapping; (d) preceding; (e) investigated; (f) subsequent.

Card 8/8

KROPOTOV, V.K.

Regularities of the charge pressure on the molten products of smelting. Izv. vys. ucheb. zav.; chern. met. no.8:22-28 '60.
(MIRA 13: 9)

1. Magnitogorskiy gornometallurgicheskiy institut.
(Blast furnaces)

KHOPOTOV, V.K., inzh.

Pressure of burden materials in blast furnaces. Stal' 20 no.11:973-977 N '60. (MIRA 13:10)

1. Magnitogorskiy gorno-metallurgicheskiy institut.
(Blast furnaces)

KROPOTOV, V.N.

Uses of polymer materials in the building industry and architecture. (MIRA 13:10)
Plast.massy no.7:75 '60.
(Polymers) (Building materials industry)

KROPOTOV, Vladimir Nikolayevich; LIPKINA, T.G., red. izd-va; KOLOKOL'NIKOV, V.S., red.; MULIKOVA, I.F., tekhn. red.

[Building and finishing materials] Stroitel'nye i otdelochnye materialy. Moskva, Gos. izd-vo "Vysshaia shkola," 1960. 311 p. (MIRA 14:6)

(Building materials) (Finishes and finishing)

KROPOTOV, Vladimir Nikolayevich; OKNORALOV, Nikolay Vasil'yevich; OKMBOREK, G.L., red.; DRANNIKOVA, M.S., tekhn. red.

[Work with plastics; student's manual] Raboty s plastichеskimi massami; posobie dlia uchashchikhsia. Moskva, Gos. uchebno-pedagog. izd-vo M-va prosv. RSFSR, 1961. 61 p. (MIRA 15:3)

(Plastics)

ACC NR: AP7005879 SOURCE CODE: UR/0181/66/008/012/3680/3681

AUTHOR: Zaripov, M. M.; Kropotov, V. S.; Livanova, L. D.; Stolov, A. L.; Yakovleva, Zh. S.

ORG: Kazan' State University im. V. I. Ul'yanov-Lenin (Kazanskiy gosudarstvennyy universitet)

TITLE: EPR and optical spectrum of Cr^{3+} ions in MgF_2

SOURCE: Fizika tverdogo tela, v. 8, no. 12, 1966, 3680-3681

TOPIC TAGS: laser material, epr spectrum, luminescence spectrum, optic spectrum, magnesium compound, fluoride, activated crystal, chromium, crystal impurity, impurity center, impurity level

ABSTRACT: To check on the two types of EPR spectra observed in ZnF_2 activated with Cr^{3+}, the authors measured the luminescence spectrum of Cr^{3+} in single crystals of MgF_2 to which Li, Na, and Cu were introduced as additives. The crystals with lithium showed an EPR spectrum (at 9.3 GHz) with a line structure having 5, 7, and 3 components when the field was parallel to the z, x, and y axes, respectively. The luminescence spectrum of the same crystals had an intense band with maximum at 7860 Å, a weaker band at 6805 Å, and narrow lines at 7320 and 7620 Å. The levels corresponding to these lines are identified. In the case of the copper impurity, the same EPR and optical spectra were observed but with lower intensity. In addition, a more complicated EPR spectrum with new lines due to several centers is observed. In the crystals with Na impurity or those without any impurity, the EPR spectra observed in the

Card 1/2 UDC: none

ACC NR: AP7005879

crystals with lithium vanishes, and only the complicated EPR spectrum observed with copper is seen. The maximum at 6805 Å in the optical spectrum becomes stronger. The results do not lead to any unique conclusions other than that the excess Cr^{3+} charge is compensated by the Li, Na, or Cu in a nonlocal manner. Orig. art. has: 1 figure and 1 formula. [WA-14] [02]

SUB CODE: 20/ SUBM DATE: 28Jun66/ OTH REF: 002

Card 2/2

ACC NR: AP7005348 SOURCE CODE: UR/0181/67/009/001/0209/0214

AUTHOR: Zaripov, M. M.; Kropotov, V. S.; Livanova, L. D.; Stepanov, V. G.

ORG: Kazan' State University im. V. I. Ul'yanov (Lenin) (Kazanskiy gosudarstvennyy universitet)

TITLE: Electron paramagnetic resonance of vanadium and chromium in CaF_2

SOURCE: Fizika tverdogo tela, v. 9, no. 1, 1967, 209-214

TOPIC TAGS: calcium fluoride, electron paramagnetic resonance, paramagnetic ion, vanadium, chromium, crystal lattice structure

ABSTRACT: The purpose of the investigation was to determine the behavior of iron-group elements in crystals in which the ligand atoms form a cube or a tetrahedron, rather than the deformed octahedron characteristic of most crystals used for EPR research. To this end, CaF_2 crystals doped with V and Cr were grown under controlled conditions and their EPR spectra studied. No EPR spectra could be produced in the CaF_2, even at 4.2K, unless a small amount of PbF_2 (0.5 - 1.5 wt.%) was added. The optimum was 0.6 wt.%. A type-I EPR spectrum of vanadium was then observed at 77K. When the CaF_2 crystal was prepared in a fluoriding atmosphere (by burning teflon in the furnace), a type-II EPR spectrum of vanadium was observed at 77K. The same treatment was necessary to grow crystals with observable EPR spectrum of chromium. A formal analysis of the EPR spectra on the basis of the spin Hamiltonian is presented. The parameters of the spin Hamiltonians are determined. The type-I EPR

Card 1/2 UDC: none

ACC NR: AP7005348

spectrum is attributed to V^{++} ions, and the type-II spectrum to V^{+++} and Cr^{+++}. The results show that the ions V^{++} and Cr^{+++} are in the electric field of trigonal symmetry and those of V^{+++} in a field of cubic symmetry, which cannot be regarded as consisting of strong cubic and weak trigonal components. The trigonal component is related to the Jahn-Teller effect. The authors thank S. A. Al'tshuler and A. M. Prokhorov for a discussion of the results, and also L. K. Aminov and B. I. Kochelayev. Orig. art. has: 2 formulas.

[02]

SUB CODE: 20/ SUBM DATE: 20Jun66/ ORIG REF: 002/ OTH REF: 005

ATD PRESS: 5116

Card 2/2

VINOKUROV, V.M.; ZARIPOV, M.M.; [illegible], V.S.; STEPANOV, V.G.

Studying Mn^{++} isomorphism in beryls by the method of electronic paramagnetic resonance. Geokhimiia no.1:104 Ja '65.
(MIRA 18:4)

1. Kazanskiy gosudarstvennyy universitet.

L 32566-66 EWP(e)/EWT(m) WH/WW

ACC NR: AP5003792 SOURCE CODE: UR/0181/66/008/001/0231/0233

AUTHORS: Zaripov, M. M.; Kropotov, V. S.; Livanova, L. D.

ORG: Kazan' State University im. V. I. Ul'yanov-Lenin (Kazanskiy gosudarstvennyy universitet)

TITLE: Electron paramagnetic resonance of Mn^{2+} ions in MgF_2

SOURCE: Fizika tverdogo tela, v. 8, no. 1, 1966, 231-233

TOPIC TAGS: electron paramagnetic resonance, magnesium compound, manganese, paramagnetic ion, fluorine, hyperfine structure, line splitting, epr spectrum

ABSTRACT: To obtain information on the interaction between paramagnetic ions and their nearest surrounding atoms, the authors investigated crystals of magnesium fluoride doped with manganese (concentration 0.5 at. in the charge), grown in a graphite crucible by the Bridgman method at 10^{-4} mm Hg. The immediate environment of the Mg^{2+} ions consists of six fluorine ions and has a high symmetry (D_{2h}).

Card 1/2

L 32566-66

ACC NR: AP5003792

This symmetry could be observed on the plotted EPR spectrum of the Mn^{2+}, evidencing isomorphous replacement of the Mg^{2} ions by the Mn^{2+} ions. A super-hyperfine structure is observed for the spectrum in a magnetic field parallel to the c axis, wherein each line of the hyperfine structure of Mn^{2+} is split into 15 components. It is deduced that out of the six fluorine atoms surrounding the Mn^{2+} ions, four are at equal distance from the central ion, and two are at a different but likewise equal distance. A formula is written out for the spin Hamiltonian describing the observed spectrum. The constants of the fine and hyperfine structures are determined by the usual procedure. The results do not agree with those obtained by M. Tinkham (Proc. Roy. Soc. v. A236, 535, 1956), and the discrepancy is attributed to errors in Tinkham's paper. Orig. art. has: 1 figure and 3 formulas.

SUB CODE: 20/ SUBM DATE: 03Jun65/ ORIG REF: 001/ OTH REF: 003

Card 2/2

VINOKUROV, V.M.; MARTINOV, M.M.; KRYUCHKOV, V.I.; STEPANOV, V.G.

Electron paramagnetic resonance of Mn^{2+} ions in cordierite. Geokhimiia no. 12:1486-1487 D '65 (MIRA 19:1)

1. Kazanskiy gosudarstvennyy universitet. Submitted November 20, 1964.

KROPOTOV, Ye.

"Turbulent Transfer of Water Vapor through Inversion Layers and the Icing Conditions of Aircraft in these Layers Connected with It," Is. Voyenno-Morskoy, No.7, 1941

USSR/Cultivated Plants - Medicinal. Essential Oils. Toxins. M-7

Abs Jour : Ref Zhur - Biol., No 20, 1958, 91861

Author : Kropotova, I.I.

Inst : Moscow University.

Title : Ginseng in the Botanical Garden of the Moscow State University.

Orig Pub : Vestn. Mosk. un-ta. Ser. biol., pochvoved., geol., geogr. 1957, No 3, 117-121.

Abstract : The experiments have been made on growing ginseng in the Botanical Garden of the Moscow State University from seeds, roots and seedlings of different origins under various soil conditions with 50% shading of the plants. The plants reached the flowering and fruit bearing stage. The experiments are being continued.

Card 1/1

KROPOTOVA, I.I.

Some data on the ecology and biological activity of the lily of the valley (Convallaria majalis L.). Vest. Mosk un. Ser. 6:Biol., pochv. 19 no.2:73-79 Mr-Ap '64.

(MIRA 17:9)

1. Botanicheskiy Moskovskogo universiteta.

SOLOV'YEV, V.D.; GUTMAN, N.R.; NEMTSEVICH, L.M.; KROPOTOVA, N.I.

Virological investigations of Bornholm disease. Vop.virus. 4 no.3:301-305 My-Je '59. (MIRA 12:8)

1. Moskovskiy institut preparatov protiv poliomiyelita Ministerstva zdravookhraneniya SSSR.
(PLEURODYNIA, EPIDEMIC, epidemiol.
in Russia (Rus))

BALAKIREVA, R.G.; KROPOTOVA, N.S.

Effectiveness of vaccination against influenza. Zhur.mikrobiol. epid. i immun. no.9:20-22 S '54. (MLRA 7:12)

1. Iz kafedry epidemiologii (zav. V.D.Solov'yev) II Moskovskogo meditsinskogo instituta imeni I.V.Stalina i Podol'skoy gorodskoy sanitarno-epidemiologicheskoy stantsii (glavnyy vrach D.B.Rozenfel'd)

(INFLUENZA, prevention and control,
Russia, mass vacc. in Russia, results)
(VACCINES AND VACCINATION,
influenza, mass vacc. in Russia, results)

IKSANOV, K.I.; KROPOTOVA, N.S.

Diphyllobothriasis on Lake Issyk-Kul'. Izv. AN Kir. SSR. Ser. biol. nauk 2 no.7:177-180 '60. (MIRA 14:6)
(ISSYK-KUL' REGION--TAPEWORMS)

SOLOV'YEV, V.D.; GUTMAN, N.R.; MENTKEVICH, L.M.; KROPOTOVA, N.S.

Properties of strains of Coxsackie virus B isolated in the City of Friazino. Vop. virus. 5 no. 2:193-199 My-S '60. (MIRA 14:4)

1. Moskovskiy institut preparatov protiv poliomiyelita.
(COXSACKIE VIRUSES)

IKSANOV, K.I.; KROPOTOVA, N.S.

Diphyllobothriasis center in the region of Lake Issyk-Kul'.
Sov. zdrav. Kir. no.1:46-47 Ja-F '62. (MIRA 15:4)

1. Iz instituta zoologii i parazitologii AN Kirgizskoy SSR (dir. - prof. M.N.Lushchikhin) i instituta epidemiologii, mikrobiologii i gigiyeny Ministerstva zdravookhraneniya Kirgizskoy SSR (dir. - kand. med.nauk Perelygin, V.M.).
(ISSYK-KUL' REGION—TAPEWORM)

KROPOTOVA, N.S.

Experimental study of passive immunization against influenza. Trudy Mosk. nauch.-issl. inst. virus. prep. 2:25-37 '61. (MIRA 17:1)

L 2327-66 EWA(k)/FBD/EWT(1)/EEC(k)-2/T/EWP(k)/EWA(m)-2/EWA(h) SCTB/IJP(c) WG
ACCESSION NR: AP5023362 UR/0020/65/164/001/0078/0079

64
B

AUTHOR: Zargar'yants, M. N.; Kiselev, A. A.; Kropotova, O. D.; Kurbatov, L. N.; Lyustrov, Yu. M.; Sigriyanskiy, V. V.; Taubkin, I. I.; Shestopalova, I. P.

TITLE: A continuous GaAs injection laser cooled by a flow of gaseous helium

SOURCE: AN SSSR. Doklady, v. 164, no. 1, 1965, 78-79

TOPIC TAGS: laser, injection laser, gallium arsenide, gallium arsenide laser, laser pumping

ABSTRACT: A continuously operating GaAs junction laser cooled by a flow of helium vapor is described. A GaAs laser was mounted on a triangular base. The p-n junction was formed by vapor diffusion of zinc into a wafer of GaAs doped with Te oriented in the (111) plane. The junction area was 0.34 x 0.4 mm. The cavity was formed by cleaving. The experimental device used to obtain continuous emission is shown in Fig. 1 of the Enclosure. The major element in the device was a cryostat consisting of a double-wall silvered glass tube with

Card 1/3

L 2327-66
ACCESSION NR: AP5023362

the air pumped out from the space between the walls. One end of the tube and a heating element were lowered into the helium dewar. The diode at the other end of the tube was cooled by the flow of the helium gas. The advantage of the cooling system was that the diode's thermal regime depended primarily on the thermal characteristics of the helium gas and on the GaAs. When the laser was placed in the liquid helium and operated in the pulsed regime at a repetition rate of 50 pulses per second and at a pulse duration of 7 μsec, the threshold current density was 1300 amp/cm^2. Under the same conditions the threshold current density of the laser cooled to ~30K by a flow of helium gas was 230 amp/cm^2. The laser was also operated continuously at temperatures between 25 and 35K. At ~30K the threshold current density for continuous operation was 360 amp/cm^2. (The output power was not given for any of the operating regimes). Orig. art. has: 1 formula and 1 figure. [CS]

ASSOCIATION: none

SUBMITTED: 12Feb65 ENCL: 01 SUB CODE: EC

NO REF SOV: 000 OTHER: 004 ATD PRESS: 4107

Card 2/3

L 2327-66
ACCESSION NR: AP5023362 ENCLOSURE: 01

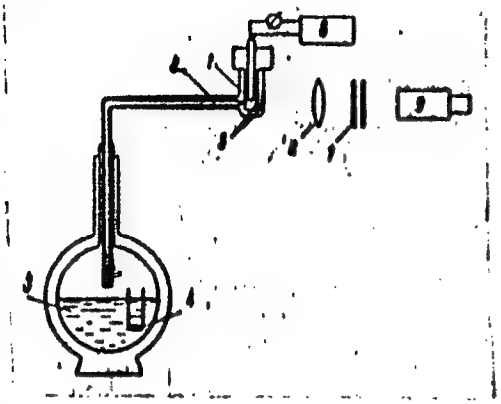


Fig. 1. The experimental setup for continuous operation of the GaAs laser

1 - GaAs diode; 2 - cryostat; 3 - liquid helium; 4 - heating element; 5 - windows; 6 - lens; 7 - Fabry-Perot interferometer; 8 - battery; 9 - image converter.

Card 3/3

VINOGRADOV, A.P.; KROPOTOVA, O.I.; USTINOV, V.I.

Possible sources of carbon in natural diamonds according to C^{12}/C^{13} isotope data. Geokhimiia no.6:643-651 Je '65. (MIRA 18:7)

1. Institut geokhimii i analiticheskoy khimii imeni Vernadskogo AN SSSR, Moskva.

GRISHINA, O.S.; KALITSEVA, L.I.; MAKSIMOVICH, K.A.; KROPOTOVA, Z.N.

Epidemiology of coli enteritis in Lvov. Zhur. mikrobiol., epid. i immun. 40 no. 8:125-130 Ag '63. (MIRA 17:9)

1. Iz L'vovskogo instituta epidemiologii, mikrobiologii i gigiyeny.

KROPOTUKHIN, A.

Fighters for technical progress. NTO 6 no.6:29-30 Je '64.
(MIRA 17:8)

1. Zamestitel' predsedatelya soveta obshchestvennogo konstruktorskogo byuro Kirovgradskogo medeplavil'nogo kombinata.

MUKHIN, D.P.; SUSLOVA, A.L.; SHEVCHENKO, K.A.; BUNINA, S.S.; KOPEYKO, I.P.; KROPOTUKHINA, I.V.

Application of therapeutic sleep in pulmonary tuberculosis in thoracic surgery. Probl. tuberk., Moskva no. 4:11-15 July-Aug. 1952. (CIML 22:5)

1. Senior Scientific Associate for Suslova; Scientific Associate for Shevchenko, Bunina, and Kopeyko; Clinical Departmental Head for Kropotukhina. 2. Of the First Surgical Clinic (Head -- D. P. Mukhin), Institute of Climatotherapy of Tuberculosis (Director -- Ye. D. Petrov), Yalta.

YAKIMOV, A.; VASIL'YEV, V.; KROPOV, S.

For the best production in the world. Sov. profsoiuzy 17 no.18:15-18 S '61. (MIRA 14:8)

1. Predsedatel' zavkoma Moskovskogo zavoda shlifoval'nykh stankov (for Yakimov). 2. Zamestitel' direktora Eksperimental'nogo nauchno-issledovatel'skogo instituta metallorezhushchikh stankov (ENIMS) (for Vasil'yev). 3. Sekretar' Moskovskogo gorodskogo soveta profsoyuzov (for Kropov).

(Moscow—Machine-tool industry—Quality control)
(Moscow—Trade unions)
(Socialist competition)

KROPOV, S.

From Moscow residents to the forum of trade unions. Okhr. truda i sots. strakh. 6 no.10:6-8 O '63. (MIRA 16:11)

1. Sekretar' Moskovskogo gorodskogo soveta professional'nykh soyuzov.

SOV/117-58-12-3/36

AUTHOR: Kropov, S.S., Engineer, Chairman of Zavkom

TITLE: The Moscow Plant of Small-Displacement Automobiles (Moskovskiy zavod malolitrazhnykh avtomobiley)

PERIODICAL: Mashinostroitel', 1958, Nr 12, pp 2 - 4 and p 1 of cover (USSR)

ABSTRACT: The article contains general information on the activities planned for 1959-65 at the Moscow Plant of Small-Displacement Automobiles, the only plant of this type in the Soviet Union. The plan includes raising production, reduction of spoilage and the use of new materials in automobile design, such as light tires, foam rubber, curved glass, resistant varnish, etc. There is 1 photo.

Card 1/1

SOV/124-58-1-88

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 1, p 11 (USSR)

AUTHOR: Kropovnitskaya, K. I.

TITLE: On the Assessment of One Approximate Solution of the Equation of Quasiharmonic Oscillations (Ob otsenke odnogo priblizhennogo resheniya uravneniya kvazigarmonicheskikh kolebaniy)

PERIODICAL: Nauchn. zap. In-ta mashinoved. i avtomatiki AN UkrSSR, 1957. Vol 6, pp 138-151

ABSTRACT: An examination of the equation of quasiharmonic oscillations of the type of

$$\frac{d^2x}{d\theta^2} + 2\gamma(\theta)\frac{dx}{d\theta} + x = 0$$

which, upon substitution of

$$\tan\phi = \frac{x}{dx/d\theta}$$

is reduced to the form (equation on next card)

Card 1/3

On the Assessment of One Approximate Solution of the Equation (cont.)

$$\frac{d\phi}{d\theta} = 1 + \gamma(\theta) \sin 2\phi$$

The solution of the last equation is sought in the form $\phi = \phi_0 + \theta + \beta(\theta)$. An approximate solution is obtained by expressing the function $\beta(\theta)$ in the following terms

$$\beta = \frac{1}{\sqrt{2}} \tan^{-1} \sqrt{2}\, \tilde{\beta}(\theta, \phi_0)$$

where $\tilde{\beta}(\theta, \phi_0)$ is expressed in terms of θ by means of quadratures. It is shown that the approximate solution becomes exact for the equation

$$\frac{d\phi}{dt} = \frac{P+N}{2} + \frac{Q}{2} \sin 2\phi - \frac{P-N}{2} \cos 2\phi$$

and expressions are obtained for the coefficients of that equation in terms of the functions $\beta(\theta, \phi_0)$ corresponding to $\phi_0 = 0, \pi/4, \pi/2, \ldots$, and their derivatives. The author proposes that the exactness of the approximate solution be assessed by the closeness of the coefficient $(P+N)/2$ to 1, that of $Q/2$ to $\gamma(\theta)$, and that of $(P-N)/2$ to 0. The author examines the case $\gamma(\theta) = \epsilon \sin \theta$ and provides

Card 2/3

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000826630005-1"

On the Assessment of One Approximate Solution of the Equation (cont.)

tables of the coefficients of the exact and the approximate equations, from which it follows that for $\epsilon < 0.25$ the coefficients are extremely close to one another, no matter what the initial value of ϕ_0, that for $0.25 < \epsilon < 0.5$ the closeness of the coefficients depends essentially on ϕ_0, and that for $\epsilon > 0.5$ the coefficients differ substantially. The paper fails to adduce any substantiation for the author's conclusion relative to the closeness among the solutions corresponding to a closeness among the coefficients.

B. S. Razumikhin

Card 3/3

BULYNKO, M.G., kand.tekhn.nauk; SOKOLOV, A.A., kand.tekhn.nauk;
KROPP, A.Ye., inzh.

Mechanical dehydration of upland peat for the production of peat litter. Torf. prom. 38 no.8:13-15 '61. (MIRA 14:12)
(Peat machinery)

[illegible], M.G.; KROPP, A.Ye.

Investigating the parameters of the mechanical dehydration of slightly decomposed peat. Trudy Pal. torf. inst. no.13:205-220 '63. (MIRA 17:12)

KROPP, A.Ya.

Certain calculated relations of power transistor transmission with a high ratio. Trudy Kal. Pol. Inst. no.13:247-254 '63. (MIRA 17:12)

1023 634.75 : 581.19

Kropp K. **Investigations over the Chemical Composition of Strawberries.**

„Badania nad składem chemicznym truskawek" Przemysł Spożywczy, No. 3, 1955, pp. 108 - 110, 1 tab

Over the years 1951 - 1953, the chemical composition of twenty different types of strawberries was investigated. The content of sugars, of acids, of non-dissoluble parts, and of the l-ascorbic acid as well as the extract were established. The investigations proved that the strawberries from the Mountain Region have, by comparison with those from Central Poland, a lower amount of sugars and of l-ascorbic acid and show also a lower extraction. On the other hand, they contain more non-dissoluble parts and free acids. On the basis of the results obtained an attempt was made to classify from an industrial point of view the types investigated.

MD

KROPP, K.

Research on the chemical composition of strawberries. p. 108

PRZEMYSL SPOZYWCZY. (Stowarzyszenie Naukowo-Techniczne Inzynierow i Techników Przemyslu Spozywczego) Warszawa, Poland
Vol.9, no.3, Mar. 1955

Monthly list of East European Accessions (EEAI) LC, Vol.9, no.1, Jan1960

Uncl.

KROPP, K.; ŁUCKA, M.

Research on the industrial utility of various kinds of plums for compotes. p. 47. (Prace Instytutow i Laboratoriow Badawczych Przemyslu Rolnego i Spozywczego, Vol. 7, No. 1, 1957, Warsaw, Poland)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, No. 8, Aug 1957, Uncl.

KROPP, L.A. (Novosibirsk, ul. Chaplygina, d.109, kv.5); NOVIKOVA, A.I.

Extraordinary resistance to anesthetics and relaxants. Vest. khir. 89 no.10:113 O '62. (MIRA 17:10)

1. Iz Novosibirskogo nauchno-issledovatel'skogo instituta tuberkuleza (dir. - zasluzhennyy vrach RSFSR kand. med. nauk M.V. Svirezhev).

KABANOV, A.N.; KROPP, L.A.; KOROTAYEVA, N.A.

Basic principles of general anesthesia in prolonged intrathoracic operations in tuberculosis of the lungs and pleura. Probl. tub. 41 no.6:24-30 '63. (MIRA 17:9)

1. Iz legochnokhirurgicheskogo otdeleniya Novosibirskogo nauchno-issledovatel'skogo instituta tuberkuleza (dir. - kand.med.nauk M.V.Svirezhev).

[illegible], Lev Davidovich; [illegible], Iron Shlemovich; [illegible], ..., red.

[Operation of battery cyclones] Ekspluatatsiia batarei[illegible] tsiklonov. Moskva, Izd-vo "Energiia," 1964. 150 p. (MIRA 17:5)

ZVENIGORODSKIY, G.Z., inzh.; KOLOMEYTSEV, V.S., inzh.;
KROPP, L.D., inzh.; KUROCHKIN, V.A., inzh.

Briquets made of Shurab brown coals and their burning efficiency.
Obog. i brik. ugl. no.26:62-69 '62. (MIRA 17:8)

LISTOV, P.N., prof., doktor tekhn.nauk; KROPP, L.I., aspirant

New methods of feed distribution on livestock farms. Izv.TSKhA no.3:209-220 '59. (MIRA 12:10)
(Feeding) (Farm mechanization)

KROPP, L. I.

Cand Tech Sci - (diss) "Study and development of rational methods in the mechanization of supplying feed in animal-raising farms (with the use of closed cable systems)." Moscow, 1961. 24 pp; (Joint Academic Council of the All-Union Scientific Research Inst for Mechanization of Agriculture "VIM" and the All-Union Sci Res Inst for Electrification of Agriculture "VIESKh"); 200 copies; price not given; bibliography on pp 23-24; (KL, 7-61 sup, 239)

LISTOV, P.N., prof., doktor tekhn.nauk; KROPP, L.I., aspirant

Using friction-type cable transmissions in feed-distributing installations. Izv.TSKhA no.1:213-229 '61. (MIRA 14:3)
(Conveying machinery)

KARASINA, E.S., kand.tekhn.nauk; PROP, L.I., inzh.

Study of heat exchange in a combustion chamber with a screen-type superheater during the burning of anthracite culm.
Teploenergetika 8 no.8:61-67 Ag '61. (MIRA 14:10)

1. Vsesoyuznyy teplotekhnicheskiy institut.
(Superheaters)

KARASINA, E.S.; KROPP, L.I.; MINTS, M.S.; KNYAZ'KOV, B.N.; LITVINOV, D.D.; GRINBLAT, Ye.I.; KAZAKOV, V.Ya.; VOLKOV, B.V.; BARDIN, V.V.

Exchange of experience. Zav.lab. 28 no.5:633-635 '62. (MIRA 15:6)

1. Vsesoyuznyy teplotekhnicheskiy institut imeni F.E.Dzerzhinskogo (for Karasina, Kropp, Mints). 2. Institut radiofiziki i elektroniki AN USSR (for Knyaz'kov, Litvinov). 3. Ural'skiy politekhnicheskiy institut imeni S.M.Kirova (for Grinblat, Kazakov). 4. Opytnokonstruktorskoye byuro sinteticheskikh produktov (for Volkov). 5. Leningradskiy tekhnologicheskiy institut imeni Lensoveta (for Bardin).
(Chemical apparatus)

KROPP, L.I., inzh.

Study of local heat stresses in a screen-type high-pressure steam superheater. Teploenergetika 9 no.12:31-37 D '62. (MIRA 16:1)

1. Vsesoyuznyy teplotekhnicheskiy institut.
(Superheaters)

KROPP, L.I., inzh.

Study of dynamic stresses arising during vibrational cleaning of a screen-type superheater. Elek. sta. 34 no.10:10-16 O '63. (MIRA 16:12)

KROPP, L.I., inzh; KUZNETSOV, N.V., doktor tekhn. nauk; YEREMIN, I.Ya., inzh.; RODIONOV, V.A., inzh.

Study of a vibrational method for cleaning a screen-type steam superheater in the TP-17 boiler operating on pulverized shale. Teploenergetika 10 no.11:32-38 N '63. (MIRA 17:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy teplotekhnicheskiy institut i Turbinno-kotel'nyy zavod.